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DEPARTMENT OF COMMERCE
BUREAU OF STANDARDS
WASHINGTON

Letter
Circular
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(August 11, 1927)

TESTING LABORATORIES
EQUIPPED FOR THERMAL EXPANSION
TESTS OF SOLIDS

Compiled by the Thermal Expansion Laboratory of the Bureau of Standards, from the replies to a questionnaire which was distributed to educational institutions and commercial laboratories and which was published in the Bureau's Technical News Bulletin No. 119, March 1927.

The Bureau of Standards, in accordance with law, makes tests and carries out investigations for Government Departments, and for the public when such tests and investigations can not be satisfactorily carried out elsewhere. On account of the large amount of Government work, it is impracticable for the Bureau to make tests for private individuals or companies if other laboratories can satisfactorily do the work. The increase in requests for expansion tests at the Bureau has increased the delay which necessarily occurs before a given test can be carried out and has made it impossible for the Bureau to devote as much time as it should to researches on thermal expansion.

The attached list has been prepared to inform persons interested, of the location of laboratories equipped to do such work and of the types of tests which these laboratories state they are prepared to carry out.

The Bureau is not able to give all details of sizes of specimens required, accuracy of results and cost of tests. These matters should be taken up with the individual laboratories selected to do the testing.

Information Section
Bureau of Standards, Washington

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DIRECTOR'S OFFICE
BUREAU OF STANDARDS

State	City	Laboratory	Temperature Range	Remarks
California	Pasadena	Dr. Robert C. Burt 327 So. Michigan Ave.	100 to 1700° F	Rockwell dilatometer. Samples from 1 to 6 inches in length. Lateral dimensions from 1/4 to 2 inches.
Connecticut	Hartford	Stanley P. Rockwell Co. 66 Trumbull Street		
Georgia	Atlanta	Georgia School of Technology, Attn: Prof. A.V. Henry, Dept. of Physics	Room temperature to 900° C	Self-recording expansion apparatus. Samples 6 inches long, 1 inch cross-section.
Illinois	Urbana	University of Illinois, Attn: Prof. C.W. Parmelee, Dept. of Ceramic Engineering	Room temperature to about 1000° C	Interferometer and also equipment to measure expansion directly. Samples for latter equipment about 9 inches long, 1 inch diameter.
Iowa	Ames	Iowa State College, Attn: Prof. S.W. Beyer, Dean, Division of Industrial Science	0 to 200° C	Interferometer. Samples about 2 cm. in length and 1 cm. in diameter.
Iowa	Iowa City	The State University of Iowa, Attn: Prof. N.O. Taylor, Dept. of Chemistry and Chemical Engineering		

State	City	Laboratory	Temperature Range	Remarks
Massachusetts	Boston	Simmons College, Attn: Prof. L.L.Campbell, Dept. of Physics		Rods of solids. Micrometer screws. The accuracy is a small fraction of one per cent
Massachusetts	Cambridge	Prof.Gordon B.Wilkes, Massachusetts Institute of Technology,Laboratory of Heat Measurements	Room temperature to 1500° C	Interferometer, micrometer eyepiece telescopes, etc.
Minnesota	Minneapolis	The University of Minnesota, Attn: Prof. Frank B.Rowley,Director, Experimental Engineering Laboratories	Up to 300° F	
New York	New York	New York Testing Laboratories,Attn:L.R.Scidell, Managing Director, 80 Washington Street	Room temperature to 600° F	
New York	Troy	Rensselaer Polytechnic Institute, Attn: Prof. Wm.Lispenard Robb, Dept.of Physics and Electrical Engineering, Russel Sage Laboratory	20 to 1000° C	Differential expansion method, and dividing engine
North Carolina	Chapel Hill	University of North Carolina, Physics Dept.		Elementary tests only

State	City	Laboratory	Temperature Range	Remarks
Pennsylvania	Pittsburgh	Pittsburgh Testing Laboratory, Attn: J. W. Reifsnyder	Room temperature to 212° F	Simple tests
Texas	Houston	Rice Institute, Attn: Prof. J. H. Pound, Dept. of Mechanical Engineering	Room temperature to 2500° F	Maximum dimensions of samples are 4 1/2 x 7 inches in cross-section and 13 inches in length
Washington	Seattle	Northwest Testing Laboratories, Attn: J. L. Avis, 2113 Third Ave.		



